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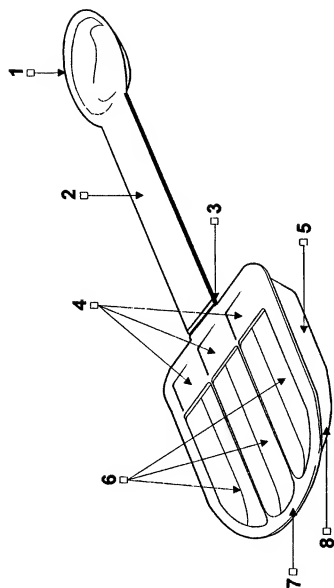


FIGURE 1.

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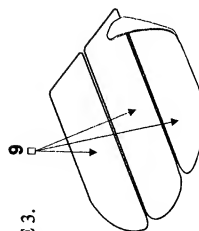
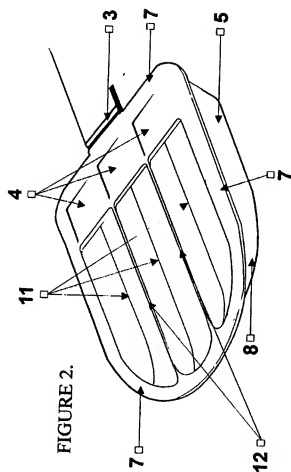
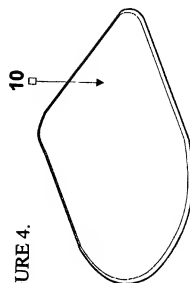
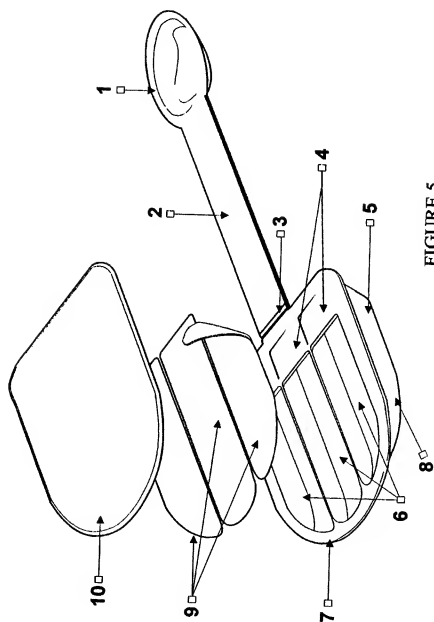


FIGURE 4.



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INSTANT BEVERAGE SPOON

This invention relates to disposable spoons pre-packed with ingredients to make instant hot or cold refreshments when mixed with water or other appropriate substances.

The notion of instantly preparing favourite refreshments with nothing more in hand than a spoon-styled device and a cup of water presents as an immensely attractive proposition.

Prior arts have sought to meet this desirable objective but have had the disadvantage of being unable to house dry and liquid ingredients simultaneously, within the same stirring bowl of a spoon. This deficiency meant that they were unable to offer combinations of dry and liquid ingredients considered essential for making particular refreshments within the same stirring bowl of a spoon. For example, prior arts were unable to accommodate unmixed combinations of granular or liquid coffee, liquid milk, sweeteners and other dry or liquid flavourings within the same stirring bowl of a spoon. In this regard, prior arts have been inflexible and limiting to choice and variety. Furthermore, the arrangements of the apparatus in some prior arts have also had the disadvantage of being prone to powdered or granular substances contained within them congealing during the infusion process. The need in the art is addressed by the present invention.

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In general, the object of this invention is to provide an instant beverage-making disposable spoon wherein are situated compartments capable of separately and simultaneously carrying dry and liquid ingredients that can be stirred into water or other appropriate substances, to make desired refreshments.

In addition to this, another object of this invention is also to provide an instant beverage-making disposable spoon wherein there are compartments within the bowl of the spoon that can be individually or collectively hermetically sealed, and where those said sealed compartments can be accessed individually, so that their pre-filled, beverage-making contents can be separately emptied into appropriate containers.

In addition to this, a further objective is to provide an instant beverage-making disposable spoon wherein there are two spoon bowls joined by a connecting shaft, and where either of the said spoon bowls is used to stir ingredients into hot or cold liquids such as water.

In addition to this, another objective of this invention is to provide an instant beverage-making disposable spoon wherein the walls of the compartments are rounded where they meet the floor of the compartments. Furthermore the floor of the compartments gradually incline upwards at the non-connecting shaft end of the bowl to facilitate the free flow of dry ingredients thus greatly reducing the

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likelihood of such ingredients congealing and sticking to the device during the infusion process.

In addition to this, a still further objective is to provide an instant beverage-making disposable spoon wherein the non-partitioned bowl is detachable from the partitioned bowl along with the connecting shaft that joins the two bowls together. The detached connecting shaft and non-partitioned bowl form the spoon device, independent of the partitioned bowl they were detached from, used to stir and ladle refreshments.

With regards to this invention, no viable, commercially available alternative spoon device exists that is of similar scope in terms of functionality, utility, ease of manufacture and concomitant cost effectiveness. The detailed descriptions that follow reveal further objectives of this invention and will lead to the outstanding advantages of this invention being readily appreciated.

Preferred embodiments of this invention will now be described with reference to accompanying drawings wherein:

FIGURE 1 shows an aerial perspective view of a dual-bowl spoon wherein one bowl is partitioned in accordance with one embodiment of this invention.

FIGURE 2 shows an enlarged view of the compartments in the partitioned bowl of the instant beverage spoon in accordance with one embodiment of this invention wherein the walls of the compartments are rounded where they meet the floor of the compartments gradually incline upwards at the non-connecting shaft end of the bowl.

FIGURE 3 shows foil seal strips used to form hermetic seals over each compartment in the partitioned bowl of the instant beverage spoon, in accordance with one embodiment of this invention.

FIGURE 4 shows plastic clip-on cover to protect the contents in the compartments of the partitioned bowl of the instant beverage spoon, in accordance with one embodiment of this invention.

FIGURE 5 shows an angular, aerial, sectioned perspective of a dual-bowl spoon wherein one bowl is partitioned, together with foil seals and plastic cover in accordance with one embodiment of this invention.

As shown in FIGURE 1, the instant beverage-making disposable spoon, in accordance with one embodiment of this invention, consists of a partitioned bowl 5 wherein the walls of the compartments are rounded where they meet the floor of the compartments and the floor of the compartments gradually incline upwards 8 at the non-connecting shaft end of the bowl, and a non-partitioned bowl 1 is joined by a connecting shaft 2. The bowls of the spoon are of different

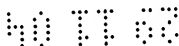
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dimensions; bowl **5** is larger than bowl **1**. The partitioned bowl of the spoon **5** is divided into three compartments **6**. The compartments **6** lie in a plane parallel to that of the connecting shaft **2**. The end of the said connecting shaft distal to the partitioned bowl **5** forms a non-partitioned bowl **1**. The said connecting shaft is optionally detachable from the partitioned bowl at junction **3** which is a specific snap-off site, allowing it to be used independent of the said partitioned bowl, for stirring and ladling.

The connecting shaft and two adjoining bowls as shown in FIGURE 1, are moulded from suitable plastic material.

In accordance with one embodiment of this invention, FIGURE 2 shows the floor and walls of each compartment in the partitioned bowl of the spoon, whereby the said walls and floors meet with rounded angulations **11** thereby facilitating the flow of ingredients from within each compartment. Undercut end cavities **4** collect residue ingredients from compartments when the non-partitioned bowl **1** is used to stir or ladle whilst still attached to the partitioned bowl **5** via connecting shaft **2**.

FIGURE 2 also shows the upper edge of the partitioned bowl **5** fashioned as a ridge **7**. The upper surface of each wall **11** demarcating each compartment is of sufficient width that together with the said ridge are used to form hermetic seals. The said seals are formed



between the plastic ridge 7, top surfaces of compartment walls 12, and foil strips 9 or any other suitable material.

Compartments 6 are filled with either dry or liquid ingredients. The said ingredients would include varieties of coffee, freeze dried teas, cocoas, milk, fruit, vegetable or other liquid concentrates, and various other desirable condiments and flavourings. Once filled, the compartments are hermetically sealed to retain their freshness.

All of the said compartments may be separately filled with the same ingredient so that for example, more than one portion of the same refreshment is made - such as three cups of coffee. Alternatively, compartments may be filled separately with coffee, milk and sweetener enabling one portion of beverage to be made that consists of all three ingredients.

Removal of the foil strip seals 9 accesses the compartments 6. Foil strip seals 9 are removed individually and the contents of exposed compartments emptied into a cup, beaker or other suitable container. Hot or cold water or other appropriate liquid is then added. Alternatively, after the said foil strip seal is removed, the content of the exposed compartment is added to a cup, beaker or other suitable container that already contains hot or cold water or other appropriate liquid.

When all the foil strip seals have been removed and contents of the exposed compartments emptied into suitable containers, the partitioned bowl 5 may be used to stir the resultant beverage. Alternatively, the non-partitioned bowl 1 may be used at any time as stirrer and ladle. Once the connecting shaft 2 has been detached from the said partitioned bowl it forms the handle for the said non-partitioned bowl.

In accordance with one embodiment of this invention, the plastic clip-on cover 10 fits over the edges 7 and protects compartments 6. Once the contents of said compartments are used the instant beverage-making disposable spoon may be discarded.

This invention has wide-ranging utility. It can be taken to or provided at any restaurant, place of work or social venue. It would also be an ideal refreshment-making device on aeroplanes, sailing vessels and in all forms of land transportation. The invention is readily portable and circumvents the need to carry several bulky containers to provide the same variety of ingredients for making hot or cold refreshments. It is also of an ideal size for carriage in lunch boxes by adults and children.

In another embodiment of the invention the individual compartments 6 of the partitioned bowl 5 are themselves individually or collectively further divided and partitioned, thus increasing the number of compartments available to be filled with beverage-making ingredients.

In another embodiment of this invention the compartments 6 of the partitioned bowl 5 are so formed that they lie in a plane perpendicular to that of the connecting shaft 2.

In another embodiment of this invention the compartments 6 of the partitioned bowl 5 are so formed that they lie in a plane diagonal to that of the connecting shaft 2.

In another embodiment of this invention ridge 7 has grooves on either side of partitioned bowl 5. The said grooves run parallel to the plane of connecting shaft 2. The lower edges of plastic cover 10 are positioned in said grooves and said plastic cover is pushed into position over compartments 6.

In another embodiment of this invention, partitioned bowl 5 has a hinged plastic cover attached to ridge 7. The said plastic cover is capable of airtight closure over each compartment 6.

In another embodiment of this invention compartments 6 each have grooves in their walls at a level distal to the floor of partitioned bowl 5 and proximal to ridge 7. The said grooves lie in a plane parallel to the longest walls of the compartments. Protective sliding shutters are placed in the grooves of each compartment allowing access to the contents of each compartment.

In another embodiment of this invention connecting shaft 2 at its end distal to non-partitioned bowl 1 is moulded to form a T-junction styled end that during the assembly process is positioned into moulded brackets formed on the external, side face of partitioned bowl 5 proximal to reservoir buckets 4 allowing the said connecting shaft together with non-partitioned bowl 1 to be detachable from the said partitioned bowl.

In another embodiment of this invention connecting shaft 2 at its end distal to non-partitioned bowl 1 tapers to form a male screw styled end that during the assembly process is screwed into position into a matching, moulded, screw threaded receptacle, formed on the external, side face of partitioned bowl 5 proximal to reservoir buckets 4 allowing the said connecting shaft together with non-partitioned bowl 1 to be detachable from the said partitioned bowl.

In another embodiment of this invention bowl 5 and bowl 1 are of similar dimensions.

In another embodiment of this invention bowl 5 is smaller than bowl 1.

CLAIMS

1. An instant beverage-making disposable spoon comprising two bowls joined by a connecting shaft either bowl capable of being used to stir or ladle, one stirring bowl is partitioned and has individual compartments capable of being filled with either dry or liquid ingredients, the said compartments are capable of being hermetically sealed and the walls of said compartments are rounded where they meet the floors which incline upwards at the non-connecting shaft end of the bowl, furthermore, the compartments are also undercut at the connecting shaft end of the bowl forming cavities whereby backflow of residual ingredients down the connecting shaft is prevented during elevation of the partitioned bowl when the other attached bowl is being used to stir or ladle.
2. The instant beverage-making spoon set forth in Claim 1, wherein each compartment has the generally rectangular shape which lies in a plane parallel to that of the said connecting shaft.
3. The instant beverage-making spoon set forth in Claim 1, wherein said connecting shaft and non-partitioned bowl are together optionally detachable from the partitioned bowl via a specified snap-off region located at the junction between the partitioned bowl and connection shaft.

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4. The instant beverage-making spoon set forth in Claim 1, wherein said spoon is entirely moulded from plastics material.
5. The instant beverage-making spoon set forth in Claim 1, wherein the partitioned bowl having compartments filled with dry or liquid beverage-making ingredient or other appropriate substances, are hermetically sealed with foil or other suitable material.
6. The instant beverage-making spoon set forth in Claim 1, wherein the partitioned bowl having compartments filled with coffee, tea, cocoa, liquid concentrate or other appropriate substance are hermetically sealed with foil or other suitable material, wherein the hermetically sealed foil or other suitable material is removable as one strip exposing all compartments at the same time or as several strips exposing individual compartments at a time.
7. The instant beverage-making spoon set forth in Claim 1, wherein the partitioned bowl having compartments filled with coffee, tea, cocoa, liquid concentrate or other appropriate substance are hermetically sealed with foil or other suitable material, wherein a plastic cap clips over the partitioned bowl of the spoon forming a seal further protecting the contents of each compartment.

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8. The instant beverage-making spoon set forth in Claim 1, wherein the compartments of bowl 5 are themselves individually or collectively further divided and partitioned, thus increasing the number of compartments available to be filled with beverage-making ingredients.
9. The instant beverage-making spoon set forth in Claim 1, wherein the ridge around the partitioned bowl has grooves on either side that run parallel to the plane of connecting shaft allowing the lower edges of the plastic cover to be positioned in said grooves and pushed into position over compartments of the bowl.
10. The instant beverage-making spoon set forth in Claim 1, wherein the partitioned bowl has a hinged plastic cover attached to its ridge and the hinged plastic cover is capable of airtight closure over each compartment.
11. The instant beverage-making spoon set forth in Claim 1, wherein each compartment is accessed through protective sliding shutters that slide in grooves situated near the upper region of the compartment walls.
12. The instant beverage-making spoon set forth in Claim 1, wherein the end of the connecting shaft proximal to the partitioned bowl, is moulded to form a T-junction styled

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terminal that during the assembly process, is positioned into moulded brackets formed on the side face of the partitioned bowl proximal to the undercut cavities, allowing the said connecting shaft to be detachable.

13. The instant beverage-making spoon set forth in Claim 1, wherein the end of the connecting shaft proximal to the partitioned bowl tapers to form a male screw styled end that during the assembly process is screwed into position into a matching, moulded, screw threaded receptacle formed on the external, side face of partitioned bowl and proximal to the undercut cavities, allowing the said connecting shaft together with non-partitioned bowl to be detachable from the said partitioned bowl.